

INDIVIDUAL HISTORICAL ASSESSMENT REPORT

Site Name/Facility:	<u>Tijuana River Pilot Channel and Smugglers Gulch Channel</u>
	<u>138a, 138b, 138c (Tijuana River Pilot Channel) and</u>
Master Program Map No.:	<u>138 and 139 (Smugglers Gulch Channel)</u>
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Date:	<u>December 12, 2012</u>
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Instructions: This form must be completed for each target facility identified in the Annual Maintenance Needs Assessment report and prior to any work on site. Attach additional sheets as needed.

EXISTING CONDITIONS

Site Conditions:

This section summarizes the Project description and existing conditions within the Project.

Project Description

The channels associated with this assessment report are located in the Tijuana River Valley (Valley), within the jurisdiction of the City of San Diego (City) (Figure 1). The Tijuana River watershed covers an area of approximately 1,725 square miles, of which 73 percent is located in Mexico and 27 percent in the United States. The main Tijuana River flows in a northwesterly direction from the international border into the Valley and City jurisdiction. Approximately 21.9 square miles of the watershed (~1% of the total watershed area) is within City jurisdiction.

The Tijuana River National Estuarine Research Reserve (TRNERR) and a portion of the City of Imperial Beach are generally west of the project area located adjacent to the Tijuana River's discharge to the Pacific Ocean. The Otay-Nestor community and the United States Naval Outlying Landing Field Imperial Beach are located north of the project area; and the community of San Ysidro is located to the east.

The Pilot Channel is included on MMP Maps 138a through 138c and the SG Channel is included on MMP Maps 138 and 139 (City of San Diego 2011a). The Pilot and SG Channels are generally located in the Valley roughly bordered by Hollister Street to the east and Monument Road to the south. The Tijuana River low flow channel splits into what are commonly referred to as the Tijuana River's Northern and Southern Channels approximately 800 feet east of Hollister Street. The Pilot Channel follows the Southern Channel.

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The Valley, including the project area, is within the Federal Emergency Management Agency's (FEMA) Special Flood Hazard Areas Subject to Inundation by the 1-percent Annual Chance Flood (100-year floodplain). The project areas are zoned OF-1-1 (Open Space-Floodplain) and AR-1-1 (Agricultural/Residential); and are designated for Open Space and Agricultural land uses in the Tijuana River Valley Land Use Plan. In addition, the project area is within the boundaries of the County of San Diego's 2.7 square mile Tijuana River Valley Regional Park (Regional Park). The project area is also within the City's Multiple Species Conservation Program's Multi-Habitat Planning Area (MHPA)..

The project consists of maintenance and dredging of the Pilot and SG channels to remove anthropogenic-derived sediment and trash that accumulates as a result of development and other practices in the upstream watershed. The removal of sediment and trash is conducted to maintain flow conveyance capacities and reduce the risk of flooding to public and private infrastructure in the Valley.

Description of creek/channel geometry(length, width, and depth):

Pilot Channel

The Pilot Channel was originally excavated in 1993 within the Southern Channel. It is has been irregularly maintained since that time as an earthen trapezoidal channel that is approximately 5 feet deep, with a 23-foot top width, and a 15-foot streambed width. According to the MMP, the Pilot Channel was constructed to divert wet-weather flows from 2- to 5-year storm events into the Southern Channel (City of San Diego 2011b). The Pilot Channel stretches from 100 feet east to 5,300 feet west of Hollister Street for a total length of 5,400 feet and it flows roughly in an east-west direction.

SG Channel

The SG Channel is an existing historical agricultural channel with manufactured berms. The contributing sub-watershed area is approximately 6.7 square miles, primarily located south of the international border within Canon de los Mataderos. The SG Channel, as originally constructed, is an earthen channel approximately 20 feet wide and 15 feet deep. The SG Channel is tributary to the South Channel and flows in a northerly direction, from the international border past Monument Road until it confluences with the Pilot Channel. The portion of the SG Channel maintained by the City extends for a distance of approximately 3,040 feet.

This section establishes the context for the evaluation of historical resources through an overview of the environmental setting, the prehistory, and the ethnographic identity of the Project area.

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Natural Environmental Setting

The Project Area of Potential Effects (APE) sits within Quaternary fill within the Tijuana River Valley (Strand 1962). This fill clearly contains modern alluvial deposits of an unknown depth. The Pacific Ocean is located approximately 2.2 miles west of the survey area.

Cultural Setting

The following sections have been excerpted from the Historical Resources Guidelines (City of San Diego 2001) and serves to provide a comparative framework for the prehistory of the region and context for this testing and evaluation report.

The history of San Diego can be divided into four prehistoric periods, one ethnohistoric period, and three historic periods.

EARLY MAN PERIOD (BEFORE 8500 BC)

No firm archaeological evidence for the occupation of San Diego County before 10,500 years ago has been discovered. The myths and history that is repeated by the local Native American groups now and at the time of earlier ethnographic research indicate both their presence here since the time of creation and, in some cases, migration from other areas. There are some researchers who advocate an occupation of Southern California prior to the Wisconsin Glaciation, around 80,000 to 100,000 years ago (Carter 1957, 1980; Minshall 1976). Local proposed Early Man sites include the Texas Street, Buchanan Canyon, and Brown sites, as well as Mission Valley (San Diego River Valley), Del Mar, and La Jolla (Bada et al. 1974; Carter 1957, 1980; Minshall 1976, 1983, 1989; Moriarty and Minshall 1972; Reeves 1985; Reeves et al. 1986). However, two problems have precluded general acceptance of these claims. First, artifacts recovered from several of the localities have been rejected by many archaeologists as natural products rather than cultural artifacts. Second, the techniques used for assigning early dates to the sites have been considered unsatisfactory (Moratto 1984; Taylor et al. 1985).

Careful scientific investigation of any possible Early Man archaeological remains in this region would be assigned a high research priority. Such a priority would reflect both the substantial popular interest in the issue and the general anthropological importance which any confirmation of a very early human presence in the western hemisphere would have. Anecdotal reports have surfaced over the years that Early Man deposits have been found in the lower levels of later sites in Mission Valley. However, no reports or analyses have been produced supporting these claims.

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<p>PALEO-INDIAN PERIOD (8500-6000 BC)</p> <p>The earliest generally-accepted archaeological culture of present-day San Diego County is the Paleo-Indian culture of the San Dieguito Complex. This complex is usually assigned to the Paleo-Indian Stage and dated to about 10,500 years ago. It would therefore appear to be contemporary with the better-known Fluted Point Tradition of the High Plains and elsewhere and the Western Pluvial Lakes Tradition of the Desert West. The San Dieguito Complex is believed to represent a nomadic hunting culture by some investigators of the complex (Davis et al. 1969; Moriarty 1969; Rogers 1929, 1966; Warren 1966, 1967), characterized by the use of a variety of scrapers, choppers, bifaces, large projectile points and crescentics; a scarcity or absence of milling implements; and a preference for fine-grained volcanic rock over metaquartzite.</p> <p>Careful scientific investigation of San Dieguito Complex sites in the region would also be assigned a high research priority. Major research questions relating to the Paleo-Indian Period include confirmation of the presence of the Fluted Point Tradition in San Diego County (Davis and Shutler 1969); better chronological definition of the San Dieguito Complex; determination of whether the San Dieguito assemblages do in fact reflect an early occupation, rather than the remains from a specialized activity set belonging to an Early Archaic Period culture; clarification of the relationship of the San Dieguito Complex, if it represents a separate culture, to the subsequent Early Archaic Period cultures; determination of the subsistence and settlement systems which were associated with the San Dieguito Complex; and clarification of the relationship of the San Dieguito Complex to similar remains in the Mojave Desert, in northwestern and central California, in southern Arizona and in Baja California. The San Dieguito Complex was originally defined in an area centering on the San Dieguito River valley, north of the City of San Diego (Rogers 1929).</p>
<p>EARLY ARCHAIC PERIOD (6000 BC-AD 0)</p> <p>As a result of climatic shifts and a major change in subsistence strategies, a new cultural pattern assignable to the Archaic Stage is thought by many archaeologists to have replaced the San Dieguito culture before 6000 BC. This new pattern, the Encinitas Tradition, is represented in San Diego County by the La Jolla and Pauma complexes. The coastal La Jolla Complex is characterized as a gathering culture which subsisted largely on shellfish and plant foods from the abundant littoral resources of the area. The La Jolla Complex is best known for its stone-on-stone grinding tools (mano and metate), relatively crude cobble-based flaked lithic technology, and flexed human burials. Inland Pauma Complex sites have been assigned to this period on the basis of extensive stone-on-stone grinding tools, Elko Series projectile points, and the absence of remains</p>

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diagnostic of later cultures.

Among the research questions focusing on this period are the delineation of change or the demonstration of extreme continuity within the La Jolla and Pauma complexes; determination of whether coastal La Jolla sites represent permanent occupation areas or brief seasonal camps; the relationship of coastal and inland Archaic cultures; the scope and character of Archaic Period long-range exchange systems; the role of natural changes or culturally-induced stresses in altering subsistence strategies; and the termination of the Archaic Period in a cultural transformation, in an ethnic replacement, or in an occupational hiatus in western San Diego County.

LATE PREHISTORIC PERIOD (AD 0-1769)

The Late Prehistoric Period in San Diego County is represented by two distinct cultural patterns, the Yuman Tradition from the Colorado Desert region and the Shoshonean Tradition from the north. These cultural patterns are represented locally by the Cuyamaca Complex from the mountains of southern San Diego County and the San Luis Rey Complex of northern San Diego County. The people of the Cuyamaca and San Luis Rey Complexes are ancestral to the ethnohistoric Kumeyaay (Diegueño) and Luiseño, respectively. Prehistorically, the Kumeyaay were a hunting and gathering culture that adapted to a wide range of ecological zones from the coast to the Peninsular Range. A shift in grinding technology, reflected by the addition of the pestle and mortar to the mano and metate, signifying an increased emphasis on acorns as a primary food staple, as well as the introduction of the bow and arrow (i.e., small Cottonwood Triangular and Desert Side-notched projectile points), obsidian from the Obsidian Butte source in Imperial County and human cremation, serve to differentiate Late Prehistoric populations from earlier peoples. Pottery is also characteristic of the Cuyamaca Complex, but is absent from the San Luis Rey Complex until relatively late (post AD 1500).

Explanatory models applied to Late Prehistoric sites have drawn most heavily on the ethnographic record. Notable research opportunities for archaeological sites belonging to the Late Prehistoric period include refining chronology, examining the repercussions from environmental changes which were occurring in the deserts to the east, clarifying patterns of inter- and intra- regional exchange, testing the hypothesis of pre-contact horticultural/agricultural practices west of the desert, and testing ethnographic models for the Late Prehistoric settlement system. Hector (1984) focused on the Late Prehistoric Period to examine the use of special activity areas within large sites typical of this period. At issue was whether activities such as tool making, pottery manufacturing, and dining were conducted in specific areas within the site, or whether each family unit recreated these activity areas throughout the site. Her findings indicated that no specialized areas existed within Late Prehistoric sites, and furthermore, that tools made during this period

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served a variety of functions.

Late Prehistoric sites appear to be proportionately much less common than Archaic sites in the coastal plains subregion of southwestern San Diego County (Christenson 1990:134-135; Robbins-Wade 1990). These sites tend to be located on low alluvial terraces or at the mouths of coastal lagoons and drainages. Of particular interest is the observation that sites located in the mountains appear to be associated with the Late Prehistoric Period. This suggests that resource exploitation broadened during that time as populations grew and became more sedentary.

ETHNOHISTORIC PERIOD

The founding of Mission San Diego de Alcalá in 1769 by Father Junípero Serra and Mission San Luis Rey de Francia in 1798 by Father Lasuén brought about profound changes in the lives of the Yuman-speaking Kumeyaay (Diegueño) and Shoshonean-speaking Luiseño of San Diego County. The coastal Kumeyaay and Luiseño were quickly brought into their respective missions or died from introduced diseases. Ethnographic work, therefore, has concentrated on the mountain and desert peoples who were able to retain some of their aboriginal culture. As a result, ethnographic accounts of the coastal Kumeyaay and Luiseño are few. Today the descendants of the Kumeyaay bands are divided among 12 reservations in the south county and the descendants of the Luiseño bands among five reservations in the north county.

The Kumeyaay are generally considered to be a hunting-gathering society characterized by central-based nomadism. While a large variety of terrestrial and marine food sources were exploited, emphasis was placed on acorn procurement and processing as well as the capture of rabbit and deer. Shippek (1963, 1989b) has strongly suggested that the Kumeyaay, or at least some bands of the Kumeyaay, were practicing proto-agriculture at the time of Spanish contact. While the evidence is problematic, the Kumeyaay were certainly adept land and resource managers with a history of intensive plant husbandry.

Kumeyaay houses varied greatly according to locality, need, choice, and raw materials. Formal homes were built only in the winter as they took some time to build and were not really necessary in the summer. Summer camps needed only a windbreak and were usually located under convenient trees, a cave fronted with rocks, or an arbor built for protection from the sun. During the summer, the Kumeyaay moved from place to place, camping wherever they were. In the winter, they constructed small elliptically-shaped huts of poles covered with brush or bark. The floor of the house was usually sunk about two feet into the earth. In the foothills and mountains, *hiwat* brush or deer broom was applied in bundles tied on with strands of yucca. In cold weather, the brush was covered with earth to help keep the heat inside. Bundles of brush were tied together to make a door just large enough to crawl through.

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Most activities, such as cooking and eating, took place outside the house. The cooking arbor was a lean-to type structure or four posts with brush over the top. Village-owned structures were ceremonial and were the center of many activities. Sweathouses were built and used by the Kumeyaay men. They were built around four posts set in a square near a river or stream and usually had a dug-out floor. The sweathouse was also used sometimes as a place for treating illnesses.

As with most hunting-gathering societies, Kumeyaay social organization was formed in terms of kinship. The Kumeyaay had a patrilineal type of band organization (descent through the male line) with band exogamy (marriage outside of one's band) and patrilocal marital residence (married couple integrates into the male's band). The band is often considered as synonymous with a village or rancheria, which is a political entity.

Almstedt (1980:45) has suggested that the term rancheria should be applied to both a social and geographical unit, as well as to the particular population and territory held in common by a native group or band. She also stressed that the territory for a rancheria might comprise a 30-square-mile area. Many households would constitute a village or rancheria and several villages were part of a larger social system usually referred to as a consanguineal kin group called a *cimuL*. The members of the *cimuL* did not intermarry because of their presumed common ancestry, but they maintained close relations and often shared territory and resources (Luomala 1963:287-289).

Territorial divisions among Kumeyaay residential communities were normally set by the circuit of moves between villages by *cimuLs* in search of food. As Spier (1923:307) noted, the entire territory was not occupied at one time, but rather the communities moved between resources in such a manner that in the course of a year all of the recognized settlements may have been occupied. While a *cimuL* could own, or more correctly control, a tract of land with proscribed rights, no one from another *cimuL* was denied access to the resources of nature (Luomala 1963:285; Spier 1923:306); since no individual owned the resources, they were to be shared.

The Kumeyaay practiced many forms of spiritualism with the assistance of shamans and *cimuL* leaders. Spiritual leaders were neither elected to nor inherited their position, but achieved status because they knew all the songs involved in ceremonies (Shipek 1991) and had an inclination toward the supernatural. This could include visions, unusual powers, or other signs of communication with the worlds beyond. Important Kumeyaay ceremonies included male and female puberty rites, the fire ceremony, the whirling dance, the eclipse ceremony, the eagle dance, the cremation ceremony, and the yearly mourning ceremony (Spier 1923:311-326).

Important areas of research for the Ethnohistoric Period include identifying the location of Kumeyaay settlements at the time of historic contact and during the following 50 years of the Spanish Period; delineating the effects of contact on Kumeyaay settlement/

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subsistence patterns; investigating the extent to which the Kumeyaay accepted or adopted new technologies or material goods from the intrusive Spanish culture; and examining the changes to Kumeyaay religious practices as a result of contact.

SPANISH PERIOD (AD 1769-1822)

In spite of Juan Cabrillo's earlier landfall on Point Loma in 1542, the Spanish colonization of Alta California did not begin until 1769. Concerns over Russian and English interests in California motivated the Spanish government to send an expedition of soldiers, settlers, and missionaries to occupy and secure the northwestern borderlands of New Spain. This was to be accomplished through the establishment and cooperative inter-relationship of three institutions: the Presidio, Mission, and Pueblo. In 1769, a land expedition led by Gaspár de Portola reached San Diego Bay, where it met those who had survived the trip by sea on the *San Antonio* and the *San Carlos*. Initially camp was made on the shore of the bay in the area that is now downtown San Diego. Lack of water at this location, however, led to the movement of the camp on May 14, 1769 to a small hill closer to the San Diego River and near the Kumeyaay village of Cosoy. Father Junípero Serra arrived in July of the same year to find the Presidio serving mostly as a hospital. The Spanish built a primitive Mission and Presidio structure on the hill near the river. The first chapel was built of wooden stakes and had a roof made of tule reeds. Brush huts and temporary shelters were also built.

Bad feelings soon developed between the native Kumeyaay and the soldiers, resulting in construction of a stockade whose wall was made from sticks and reeds. By 1772, the stockade included barracks for the soldiers, a storehouse for supplies, a house for the missionaries, and the chapel, which had been improved. The log and brush huts were gradually replaced with buildings made of adobe bricks. Flat earthen roofs were eventually replaced by pitched roofs with rounded roof tiles. Clay floors were eventually lined with fired-brick.

In August 1774, the Spanish missionaries moved the Mission San Diego de Alcalá to its present location six miles up the San Diego River valley (modern Mission Valley) near the Kumeyaay village of Nipaguay. Begun as a thatched jacal chapel and compound built of willow poles, logs, and tules, the new Mission was sacked and burned in the Kumeyaay uprising of November 5, 1775. The first adobe chapel was completed in October 1776 and the present church was begun the following year. A succession of building programs through 1813 resulted in the final rectilinear plan that included the church, bell tower, sacristy, courtyard, residential complex, workshops, corrals, gardens, and cemetery (Neuerburg 1986). Orchards, reservoirs, and other agricultural installations were built to the south on the lower San Diego River alluvial terrace and were irrigated by a dam and aqueduct system.

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In 1798, the Spanish constructed the Mission San Luis Rey de Francia in northern San Diego County. They also established three smaller Mission outposts (asistencias) at Santa Ysabel, Pala, and Las Flores (Smythe 1908; Englehardt 1920; Pourade 1961). The Mission system had a great effect on all Native American groups from the coast to the inland areas and was a dominant force in San Diego County.

Life for the new settlers at the San Diego Presidio was isolated and difficult. The arid desert climate and aggressive Native American population made life hard for the Spanish settlers. They raised cattle and sheep, gathered fish and seafood, and did some subsistence farming in the San Diego River valley to generate enough food to keep the fledgling community of a few hundred Spaniards and hundreds of Native American neophytes alive. The situation for Spanish Period San Diegans was complicated by the Spanish government's insistence on making trade with foreign ships illegal. Although some smuggling of goods into San Diego was done, the amounts were likely small (Smythe 1908:81-99; Williams 1994).

Significant research topics for the Spanish Period involve the chronology and ecological impact caused by the introduction of Old World plants and the spread of New World domesticates in Southern California; the differences and similarities in the lifeways, access to resources, and responses to change between different Spanish institutions; the effect of Spanish colonization on the Kumeyaay population; and the effect of changing colonial economic policies and the frontier economic system on patterns of purchase, consumption, and discard.

MEXICAN PERIOD (AD 1822-1846)

In 1822, the political situation changed. Mexico won its independence from Spain and San Diego became part of the Mexican Republic. The Mexican Government opened California to foreign ships and a healthy trade soon developed, exchanging the fine California cattle hides for the manufactured goods of Europe and the eastern United States. Several of these American trading companies erected rough sawn wood-plank sheds at La Playa on the bay side of Point Loma. The merchants used these "hide-houses" for storing the hides before transport to the east coast (Robinson 1846:12; Smythe 1908:102). As the hide trade grew, so did the need for more grazing lands. Thus, the Mexican Government began issuing private land grants in the early 1820s, creating the rancho system of large agricultural estates. Much of the land came from the Spanish missions, which the Mexican government secularized in 1833. The Mission system, however, had begun to decline when the Mission Indians became eligible for Mexican citizenship and refused to work in the Mission fields. The ranchos dominated California life until the American takeover in 1846 (Smythe 1908:101-106; Robinson 1948; Killea 1966; Pourade 1963). The Mexican Period brought about the continued displacement and

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acculturation of the native populations.

Another change in Mexican San Diego was the decline of the Presidio and the rise of the civilian Pueblo. The establishment of Pueblos in California under the Spanish government met with only moderate success and none of the missions obtained their ultimate goal, which was to convert to a Pueblo. Pueblos did, however, begin to form somewhat spontaneously near the California Presidios. As early as 1791, Presidio commandants in California were given the authority to grant small house lots and garden plots to soldiers and their families (Richman 1911:346). Sometime after 1800, soldiers from the San Diego Presidio began to move themselves and their families from the Presidio buildings to the tableland down the hill near the San Diego River. Historian William Smythe noted that Don Blas Aguilar, who was born in 1811, remembered at least 15 such grants below Presidio Hill by 1821 (Smythe 1908:99). Of these 15 grants, only five within the boundaries of what would become Old Town had houses in 1821. These included the retired commandant Francisco Ruiz adobe (now known as the Carrillo Adobe), another building later owned by Henry Fitch on Calhoun Street, the Ybanes and Serrano houses on Juan Street near Washington Street, and a small adobe house on the main plaza owned by Juan Jose Maria Marron (*San Diego Union* 6-15-1873:3). By 1827, as many as 30 homes existed around the central plaza, and in 1835, Mexico granted San Diego official Pueblo (town) status. At this time the town had a population of nearly 500 residents, later reaching a peak of roughly 600 (Killea 1966:9-35). By 1835, the Presidio, once the center of life in Spanish San Diego, had been abandoned and lay in ruins. Mission San Diego de Alcalá fared little better. In 1842, 100 Indians lived under the care of the friars and only a few main buildings were habitable (Pourade 1963:11-12, 17-18). The town and the ship landing area (La Playa) were now the centers of activity in Mexican San Diego.

Adobe bricks were used as the primary building material of houses during the Mexican Period because wood was scarce and dirt and labor were plentiful. The technique had been brought to the New World from Spain, where it had been introduced by the Moors in the eighth century. Adobe bricks were made of a mixture of clay, water sticks, weeds, small rocks, and sand. The sticks, weeds, and small rocks held the bricks together and the sand gave the clay something to stick to. The mixture was poured into a wooden form measuring about 4 inches by 11 inches by 22 inches and allowed to dry. A one-room, single-story adobe required between 2,500 and 5,000 bricks. Walls were laid on the ground or built over foundations of cobblestone from the riverbed. To make walls, the adobe bricks were stacked and held together with a thick layer of mortar (mud mixed with sand). Walls were usually three-feet-thick and provided excellent insulation from the winter cold and summer heat. To protect the adobe bricks from washing away in the rain, a white lime plaster or mud slurry was applied to the walls by hand and smoothed with a rock plaster smoother. The lime for the lime plaster was made by burning

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seashells in a fire. The lime was then mixed with sand and water. Once the plaster had dried, it formed a hard shell that protected the adobe bricks. The roof was usually made of carrizo cane bound with rawhide strips. Floors were usually of hard packed dirt, although tile was also used.

The new Pueblo of San Diego did not prosper as did some other California towns during the Mexican Period. In 1834, the Mexican government secularized the San Diego and San Luis Rey missions. The secularization in San Diego County had the adverse effect of triggering increased Native American hostilities against the Californios during the late 1830s. The attacks on outlying ranchos, along with unstable political and economic factors helped San Diego's population decline to around 150 permanent residents by 1840. San Diego's official Pueblo status was removed by 1838 and it was made a subprefecture of the Los Angeles Pueblo. When the Americans took over after 1846, the situation had stabilized somewhat and the population had increased to roughly 350 non-Native American residents (Killea 1966:24-32; Hughes 1975:6-7).

Two important areas of research for the Mexican Period are the effect of the Mexican rancho system on the Kumeyaay population and the effect of changing colonial economic policies and the frontier economic system on patterns of purchase, consumption, and discard.

AMERICAN PERIOD (AD 1846-PRESENT)

When United States military forces occupied San Diego in July 1846, the town's residents split on their course of action. Many of the town's leaders sided with the Americans, while other prominent families opposed the United States invasion. A group of Californios under Andres Pico, the brother of the Governor Pio Pico, harassed the occupying forces in Los Angeles and San Diego during 1846. In December 1846, Pico's Californios engaged U.S. Army forces under General Stephen Kearney at the Battle of San Pasqual and inflicted many casualties. However, the Californio resistance was defeated in two small battles near Los Angeles and effectively ended by January 1847 (Harlow 1982; Pourade 1963).

The Americans raised the United States flag in San Diego in 1846 and assumed formal control with the Treaty of Guadalupe-Hidalgo in 1848. In the quarter of a century following 1848, they transformed the Hispanic community into a thoroughly Anglo-American one. They introduced Anglo culture and society, American political institutions, and especially American entrepreneurial commerce. By 1872, they even relocated the center of the city and community to a new location that was more accessible to the bay and to commerce (Newland 1992:8). Expansion of trade brought an increase in the availability of building materials. Wood buildings gradually replaced adobe structures. Some of the earliest buildings to be erected in the American Period

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were "pre-fab" houses which were built on the east coast of the United States, shipped in sections around Cape Horn, and reassembled in San Diego.

In 1850, the Americanization of San Diego began to develop rapidly. On February 18, 1850, the California State Legislature formally organized San Diego County. The first elections were held at San Diego and La Playa on April 1, 1850 for county officers. San Diego grew slowly during the next decade. San Diegans attempted to develop the town's interests through a transcontinental railroad plan and the development of a new town closer to the bay. The failure of these plans, in addition to the onset of the Civil War and a severe drought that crippled ranching, left San Diego as a remote frontier town. The troubles led to an actual drop in the town's population from 650 in 1850 to 539 in 1860 (Garcia 1975:77). Not until land speculator and developer Alonzo Horton arrived in 1867 did San Diego begin to develop fully into an active American town (MacPhail 1979).

Alonzo Horton's development of a New San Diego (modern downtown) in 1867 began to swing the community focus away from Old Town. After the county seat was moved in 1871 and a fire destroyed a major portion of the business block in April 1872, Old Town rapidly declined in importance.

American Period resources can be categorized into remains of the frontier era, rural farmsteads, and urban environments, with different research questions applicable to each category. Important research topics for the frontier era include studying the changing function of former Mexican ranchos between 1850 and 1940 and investigating the effect on lifestyles of the change from Hispanic to Anglo-American domination of the Pueblo of San Diego. Research domains for rural farmsteads include the definition of a common rural culture, comparing the definition of wealth and consumer preferences of successful rural farm families versus middle and upper-middle class urban dwellers, definition of the evolution and adaptation of rural vernacular architecture, and identification of the functions of external areas on farmsteads. Research questions for urban environments include definition of an urban subsistence pattern; definition of ethnic group maintenance and patterns of assimilation for identifiable ethnic groups; identification of specific adaptations to boom and bust cycles; definition of a common culture for working, middle, and upper-middle class urban residents; identification of adaptations to building techniques, architectural styles, technological change, and market fluctuations through analysis of industrial sites; and investigation of military sites to relate changes in armament technology and fortification expansion or reduction to changing priorities of national defense.

ARCHITECTURE

The built environment, including structures and landscapes, is a vital source of historical evidence on past lifeways, work, ideas, cultural values, and adaptations. The built

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environment is neither a product of random events nor a static phenomena. The rearrangement of structural features and land use are part of the way in which people organize their lives. Landscapes are lands that have been shaped and modified by human actions and conscious design to provide housing, accommodate production systems, develop communication and transportation networks, designate social inequalities, and express aesthetics (Rubertone 1989).

Vernacular architectural studies have demonstrated that pioneer farmers and urban dwellers used folk styles to meet specific needs. Analysis of these house types illustrates adaptation by households as a result of changing needs, lifestyle, and economic status. Studies of structural forms at military complexes have documented changes in technology and national defense priorities, and industrial site studies have documented technological innovation and adaptation. The spatial relationships of buildings and spaces, and changes in those relationships through time, also reflect cultural values and adaptive strategies (Carlson 1990; Stewart-Abernathy 1986).

San Diego's built environment spans over 200 years of architectural history. The real urbanization of the City as it is today began in 1869 when Alonzo Horton moved the center of commerce and government from Old Town (Old San Diego) to New Town (downtown). Development spread from downtown based on a variety of factors, including the availability of potable water and transportation corridors. Factors such as views, and access to public facilities affected land values, which in turn affected the character of neighborhoods that developed.

During the Victorian Era of the late 1800s and early 1900s, the areas of Golden Hill, Uptown, Banker's Hill, and Sherman Heights were developed. Examples of the Victorian Era architectural styles remain in those communities, as well as in Little Italy.

Little Italy developed in the same time period. The earliest development of the Little Italy area was by Chinese and Japanese fishermen who occupied stilt homes along the bay. After the 1905 earthquake in San Francisco, many Portuguese and Italian fishermen moved from San Francisco into the area; it was close to the water and the distance from downtown made land more affordable.

Barrio Logan began as a residential area, but because of proximity to rail freight and shipping freight docks the area became more mixed with conversion to industrial uses. This area was more suitable to the industrial uses because land values were not as high: topographically the area is more level and not as interesting in terms of views as the areas north of downtown. Various ethnic groups settled in the area because their land ownership was available to them.

San Ysidro began to be developed at about the same time, the turn of the century. The early settlers were followers of the Littlelanders movement. There, the pattern of development was lots designed to accommodate small plots of land for each homeowner

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to farm as part of a farming-residential cooperative community. Nearby Otay Mesa-Nestor began to be developed by farmers of Germanic and Swiss background. Some of the prime citrus groves in California were in the Otay Mesa-Nestor area. In addition, there were grape growers of Italian heritage who settled in the Otay River Valley and tributary canyons and produced wine for commercial purposes.

At the time downtown was being built, there began to be summer cottage/retreat developments in what are now the Beach communities and the La Jolla area. The early structures in these areas were not of substantial construction; they were primarily temporary vacation housing.

Development spread to the Greater North Park and Mission Hills areas during the early 1900s. The neighborhoods were built as small lots, a single lot at a time; there was not large tract housing development of those neighborhoods. These areas provided affordable housing away from the downtown area and development expanded as transportation improved.

There was farming and ranching in Mission Valley until the middle portion of the 20th century when the uses were converted to commercial and residential. There were dairy farms and chicken ranches adjacent to the San Diego River where now there are motels, restaurants, office complexes, and regional shopping malls.

There was little development north of the San Diego River until Linda Vista was developed as military housing in the 1940s. The federal government improved public facilities and extended water and sewer pipelines to the area. From Linda Vista, development spread north of Mission Valley to the Clairemont Mesa and Kearny Mesa areas. Development in these communities was mixed use and residential on moderate-size lots.

San Diego State University was established in the 1920s. Development of the state college area began then and the development of the Navajo community was outgrowth from the college area and from the west.

Tierrasanta, previously owned by the U.S. Navy, was developed in the 1970s. It was one of the first planned unit developments with segregation of uses. Tierrasanta and many of the communities that have developed since, such as Rancho Penasquitos and Rancho Bernardo, represent the typical development pattern in San Diego in the last 25 to 30 years: uses are well-segregated with commercial uses located along the main thoroughfares, and the residential uses are located in between. Industrial uses are located in planned industrial parks.

Examples of every major period and style remain, although few areas retain neighborhood-level architectural integrity due to several major building booms when older structures were demolished prior to preservation movements and stricter

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regulations regarding historic structures. Among the recognized styles in San Diego are Spanish Colonial, Pre-Railroad New England, National Vernacular, Victorian Italianate, Stick, Queen Anne, Colonial Revival, Neoclassical, Shingle, Folk Victorian, Mission, Craftsman, Monterey Revival, Italian Renaissance, Spanish Eclectic, Egyptian Revival, Tudor Revival, Modernistic, and International (McAlester and McAlester 1990).

Research interests related to the built environment include San Diego's railroad and maritime history; development in relationship to the automobile; the role of recreation in the development of specific industries, as well as the design and implementation of major regional planning and landscaping projects; the role of international fairs on architecture, landscape architecture, and city building; the development of industrial and military technologies between the two world wars; the relationship between climate, terrain, native plant material, local gardening, and horticultural practices; planning and subdivision practices from the turn of the century to the present day; and the post-war period of suburbanization.

Survey Methods and Date:

Area of Potential Effects (APE)

In accordance with Mitigation Measure 4.4.1, the Project APE includes access, staging, and maintenance areas for a total of approximately 15 acres.

METHODS

The following sections describe the methods that were used for the intensive pedestrian survey of the Project area.

Survey Methods

URS conducted archival research and reviewed Project related documents in order to survey the Project APE. The document review included the Master Storm Water System Maintenance Program, archaeological site records, and historical maps (Confidential Attachment 2).

Following the initial archival research, an intensive pedestrian survey was executed. The goal of the survey was complete coverage of the Project APE using linear transects, with surveyors spaced 10 to 15 meters apart (10-meter spacing with vegetation, 15-meter spacing with no vegetation). These thresholds provide complete coverage of the Project APE unless circumstances such as vegetation, steep slopes, or existing buildings obstruct ground surface visibility.

On November 14, 2012, the intensive pedestrian survey of the Project APE was conducted by URS. The survey was conducted by Arleen Garcia-Herbst, a Registered

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Professional Archaeologist from URS, and Native American Monitor, Howard Diaz, from Red Tail Monitoring and Research, Inc. Coverage was completed using transects, spaced at 5 to 15-meter wide intervals over the survey area (transect spacing was smaller in some areas of the Project due to dense vegetation filling in and narrowing the storm water channel). Ground visibility ranged from 100% in Staging Area B and the Pilot Channel Access Road areas to less than 10% in vegetated areas along the Pilot Channel and Staging Area D. Rodent burrowing activity was also present and aided in exposing the ground surface in otherwise dense vegetated areas.

The survey team was equipped with Trimble XH global positioning units, which were used to capture the geographic UTM coordinates and to record any new observations of cultural materials.

Record Search Results

This section summarizes the previous studies and cultural resources within the Project APE and within a half-mile radius.

Record Search Results

Two records searches for previously conducted investigations and previously recorded cultural resources were conducted at the South Coastal Information Center (SCIC) to determine previously recorded sites and cultural resource investigations within the Project APE and an additional half-mile search buffer (Figure 2). Results received from the SCIC contained specific information regarding all previously recorded prehistoric and historic sites and isolates with trinomial or primary numbers; site record forms and updates for all archaeological resources previously identified; and previous investigation boundaries and National Archaeological Database citations for associated reports, historic maps, and historic addresses. Also reviewed were the properties listed on the California Points of Historical Interest, California Historical Landmarks, California Historical Resources Inventory, local registries of historic properties, California Register of Historical Resources, and National Register of Historic Places (NRHP).

URS requested a records search from the SCIC on October 22, 2012 and on November 11, 2012. Results from the combined record searches revealed that 35 investigations have been previously conducted within the Project footprint and Project buffer (Attachment 1, Table 1). Of the 35 investigations, 20 investigations were conducted within the Project footprint. The SCIC identified a total of 21 previously recorded cultural resources (6 historic sites and 15 prehistoric sites) within the Project footprint and Project buffer (Attachment 1, Table 2 and Confidential Figure 3). Of the 21 previously recorded resources, three occur within the Project footprint (CA-SDI-10669, CA-SDI-13486/13527, and CA-SDI-17240). One resource (CA-SDI-8605), located in the Project buffer, was recommended as ineligible for the NRHP listing (6Y). One resource (CA-

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SDI-17240), located in the Project footprint, was recommended as eligible for listing on the NRHP (Criteria 3/C). The remaining 19 resources remain unevaluated for NRHP eligibility.			
Are any Native American Tribes expected to be concerned about the proposed maintenance?			
YES		NO	<input checked="" type="checkbox"/>
If yes, identify the tribe and their potential concerns:			
<p>As per the Master Storm Water System Maintenance Program Appendix C, Mitigation Monitoring and Reporting Program, consultation with the Native American Heritage Commission and the local Native American community for input regarding possible impacts to historical resources within the Project APE, particularly as they relate to traditional cultural properties and areas of Native American sensitivity, was not required. However, Native American Monitor, Howard Diaz, from Red Tail Monitoring and Research, Inc. participated in the pedestrian survey of the Project and expressed no concerns regarding historical resources.</p>			
Archaeological Survey Results:			
<p>Three previously recorded sites were relocated and one newly discovered isolate was identified as a result of the intensive pedestrian survey (Confidential Attachment 3 and Confidential Figure 4).</p>			
<p><i>CA-SDI-10669</i></p> <p>Site CA-SDI-10669 was first recorded by Florence Shipek in 1976 as a possible location of the ethnographically-recorded Kumeyaay village of Mellejo. Since that time, an assortment of surface and subsurface discoveries has been attributed to CA-SDI-10669, resulting in the documentation of an extensive shell and lithic scatter by Seth Rosenberg in 2008. According to Rosenberg, the history of the property includes long term dumping of modern trash, recollection of the trash, compaction, and spreading out of the resulting milled-trash mixed with fill. The subsequent use of the property for agriculture included frequent disking over many years which likely resulted in the upward movement of subsurface deposits. Based on the recovery of a few artifacts outside of the prerecorded boundaries of the site by Rosenberg, the surface expression of the site was expanded to the north.</p> <p>Unfortunately, the predominance of mottled deposits including modern trash intermixed with elements of the prehistoric occupation of the area indicated that this portion of Site CA-SDI-10669 did not retain integrity. According to the site forms provided by the</p>			

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SCIC, Site CA-SDI-10967 was thought to be a possible component of the ethnographically-recorded Kumeyaay village of Mellejo (CA-SDI-10669). However, given the very narrow range of artifacts recovered, it appeared to Rosenberg that Site CA-SDI-10967 was primarily a resource processing site for marine shell and lithic resources. The lack of a wider range of artifacts and any darkened midden soils indicative of long-term occupation negated the interpretation of a seasonal camp or village site. Due to the lack of integrity and narrow breadth of artifacts and ecofacts, the site did not possess further research potential.

During the current 2012 survey, Ms. Garcia-Herbst and Mr. Diaz observed a metavolcanic lithic scatter within the boundaries of the site but outside the Project APE on the slope next to a graded recreational hiking trail through the site; a volcanic flake, marine shell (mussel), and fire affected rock within the active storm water drainage channel (disturbed context); and a volcanic flake and possible glass flake within an existing graded area to be used for staging, the latter two locations being part of the Project APE. The observance of cultural materials no longer in situ in the storm water channel coupled with significant grading and mounding of site sediments to create the storm water channel berms and adjacent recreational hiking trails indicated that the portion of Site CA-SDI-10669 present in the Project APE did not retain integrity nor possess further research potential.

CA-SDI-13486/13527

This prehistoric site was originally recorded by Richard Coleman in 1992 as a “sparse scatter of stone tools and marine shell.” Artifacts recorded include one unidirectional core and two flakes of fine-grained meta-volcanic material (green felsite) and one oxidized and cracked piece of thermally-altered rock (TAR). In 2010, N. Blotner, J. Berryman, and S. Rosenberg revisited the southwestern portion of the site as part of a cultural resources survey for the W-9/W-15 RVSS Towers Project. A dispersed smear of marine shell (*Chione* sp. and unidentifiable) and six surface artifacts (one medium-grained metavolcanic scraper, two granite manos, one medium-grained metavolcanic core, one fine-grained metavolcanic flake, and one fine-grained metavolcanic debitage fragment) were identified. Shell was also identified on the north side of the fence. Based on the thin scatter, it is likely that the shell was dragged from CA-SDI-13486 and represents a disturbed portion of the site.

Twelve shovel test pits (STPs 1-12) and one excavation unit (EU 1) were excavated in July 2010 to determine the extent and structure of any possible subsurface cultural deposits. Four of the 12 STPs excavated were positive for cultural recovery. STP 4, STP 7, and STP 8 all contained moderate amounts of marine shell from 0-40 centimeters (cm) below ground surface. STP 4 also contained a single flake and STP 7 contained three

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faunal bone fragments. STP 9 contained large amounts of marine shell from 0-60 cm below ground surface, with the highest concentrations of shell between 30 and 50 cm. In addition to marine shell, modern disturbances such as concrete, glass, and plastic fragments were identified throughout the STPs, primarily at depths of 0-40 cm below ground surface.

The -by-1meter excavation unit was excavated in 10-cm levels following the ground surface contour. Positive cultural recovery occurred at stratigraphic levels ranging from 0-50 cm below ground level. Soil was culturally sterile from 50-70 cm. Large amounts of marine shell were recovered from depths of 0-50 cm, with the highest concentrations of shell between 20 and 50 cm. In addition to marine shell, modern disturbances such as concrete, glass, and plastic fragments were identified throughout the EU, primarily at depths of 0-40 cm below ground surface. The modern disturbances were thoroughly intermixed with the marine shell fragments at all levels, and thus indicated a lack of a culturally-intact deposit.

Soils in the site area were recorded as very dark greyish-brown silty sand with few alluvial pebbles. Vegetation in the immediate area of the shell and artifact scatter was sparse and consisted primarily of coastal sage scrub and chaparral.

During the current survey in 2012, Ms. Garcia-Herbst and Mr. Diaz observed that the portion of the site within the Project APE has been disturbed by grading and rodent burrowing. Additionally, several modern concrete-lined drainage channels and an electrical meter station have been constructed near the site within the Project APE. No prehistoric or historic cultural materials were observed within the site boundary during the survey. A modern rock ring was observed within the site boundary. The observance of modern disturbance by prior archaeological excavation in 1992 and subsequent grading and rodent burrowing indicated that the portion of Site CA-SDI-13486 present in the Project APE did not retain integrity nor possess further research potential.

CA-SDI-17240

This historic site consists of the 800-foot-long Hollister Street Bridge, a viaduct over the Tijuana River channel and basin. It is a mid-twentieth century engineering structure that represents traditional wood-pile, wood-beam, wood-guardrail bridge construction, and carries a historic road from San Diego south into the Tijuana River Valley for farm, school, and international traffic. When it was first recorded in 2004 by James Steeley, the bridge appeared to be intact from its original construction with typical repairs and component replacements associated with this bridge type. Official Caltrans documentation listed a 1953 construction date, which was likely a major rehabilitation of an existing bridge, according to Steeley.

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The Hollister Street Bridge was recommended as eligible for listing on the NRHP (Criteria 3/C) as a mid-twentieth century engineering structure and the site record has a Status Code of 3 (appears eligible for listing to the National Register and California Register through survey evaluation). However, Caltrans determined the bridge was not eligible for the NRHP as part of their historic bridge inventory completed in 1986 and updated in 2010 (See "Historical Significance – Local Agency Bridges" at <http://www.dot.ca.gov/hq/structur/strmaint/historic.htm>).

During the current survey in 2012, Ms. Garcia-Herbst and Mr. Diaz observed that the bridge remains in the same condition as documented by Steeley in 2004.

AGH-ISO-001

During the current survey in 2012, Ms. Garcia-Herbst and Mr. Diaz observed this prehistoric isolate that includes a metavolcanic and volcanic core, as well as a metavolcanic flake. All cultural materials were located in the active storm water drainage and are in a disturbed context.

MAINTENANCE IMPACTS

Is there a moderate or high potential for archaeological resources to occur in or adjacent to the impact area:

YES		NO	<input checked="" type="checkbox"/>
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MITIGATION

Environmental Mitigation Requirements:

HIST-1 Flag, cap or fence all historical resource areas prior to initiation of maintenance activities.

HIST-2 Conduct a pre-maintenance meeting on-site prior to any activity that may occur within or adjacent to sensitive historical resources. The qualified archaeologist shall point out sensitive historical resources to be avoided during maintenance, identify any specific measures which should be implemented to minimize impacts, and direct crews or other personnel to protect sensitive historical resources as necessary.

What, if any, PEIR mitigation measures are applicable?

Historical Resources 4.4.3

Applicable PEIR Mitigation Measures have been included in entirety in Attachment 4.

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MITIGATION	
What, if any, other measures are required?	
See site specific recommendations below.	

ADDITIONAL COMMENTS OR RECOMMENDATIONS	
Recommendations:	
<p>Cultural resources and Native American monitoring is recommended for portions of the channel dredging that previously cut through Site CA-SDI-10669. Following the monitoring of activities in this area, a monitoring report will be submitted to the City of San Diego that provides recommendations concerning the need for future monitoring during subsequent maintenance of the Project APE within the site boundary. Cultural resources monitoring will mitigate potential impacts to buried cultural materials to a less than significant level.</p> <p>Provided that there are no excavations conducted within the Project APE within the site boundary, no further work is recommended for Site CA-SDI-13486.</p> <p>No further work is recommended for CA-SDI-17240 and AGH-ISO-001. The proposed maintenance would not alter or disturb CA-SDI-17240 and AGH-ISO-001 is in a disturbed context within the active drainage.</p>	
Individual Biological Assessment Report Attachments:	
Attachment 1	Records Search Results Summary
Attachment 2	Records Search Results (Confidential)
Attachment 3	Photo Log and Department of Parks and Recreation Forms (Confidential)
Attachment 4	Applicable PEIR Mitigation Measures
References:	
<p>Almstedt, Ruth 1980 Ethnohistoric Documentation of Puerta La Cruz, San Diego County, California. Prepared for the California Department of Transportation, District 11.</p> <p>Bada, Jeffrey L., Roy A. Schroeder and George F. Carter 1974 New Evidence for the Antiquity of Man in North America Deduced from Aspartic Acid Racemization. <i>Science</i> 184:791-793.</p>	

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ADDITIONAL COMMENTS OR RECOMMENDATIONS

Carlson, Shawn Bonath

1990 The Persistence of Traditional Lifeways in Central Texas. *Historical Archaeology* 24(4):50-59.

Carter, George F.

1957 *Pleistocene Man at San Diego*. Baltimore: John Hopkins Press.

1980 *Earlier Than You Think: A Personal view of Man in America*. College Station: Texas A & M University Press.

Christenson, Lynne E.

1990 *The Late Prehistoric Yuman People of San Diego County, California: Their Settlement and Subsistence System*. Unpublished Ph.D. dissertation, Department of Anthropology, Arizona State University.

City of San Diego

2001 San Diego Municipal Code, Land Development Code, Historical Resources Guidelines. Adopted September 28, 1999, Amended June 6, 2000 by Resolution No. R-293254-3 and Amended April 30, 2001 by City Manager Document No. C-10912.

2011 a Master Storm Water Maintenance Program. San Diego, California: October 2011

2011 b Final Recirculated Master Storm Water System Maintenance Program PEIR. San Diego, California: October 2011.

Davis, Emma Lou, Clark W. Brott and David L. Weide

1969 *The Western Lithic Co-Tradition*. San Diego Museum Papers No. 6.

Davis, Emma Lou, and Richard Shutler, Jr.

1969 Recent Discoveries of Fluted Points in California and Nevada. *Nevada State Museum Anthropological Papers* 14:154-169.

Englehardt, Fr. Zephyrin

1920 *San Diego Mission*. San Francisco: The James H. Barry Co.

Garcia, Mario T.

1975 Merchants and Dons: San Diego's Attempt at Modernization 1850-1860. *Journal of San Diego History* 21 (Winter):52-88.

Harlow, Neal

1982 *California Conquered: The Annexation of a Mexican Province 1846-1850*. Berkeley: University of California Press.

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ADDITIONAL COMMENTS OR RECOMMENDATIONS

Hector, Susan M.

1984 *Late Prehistoric Hunter-Gatherer Activities in Southern San Diego County, California*. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Los Angeles.

Hughes, Charles

1975 The Decline of the Californios: The Case of San Diego 1846-1856. *Journal of San Diego History* 21 (Summer):1-32.

Killea, Lucy L.

1966 The Political History of a Mexican Pueblo: San Diego from 1825-1845. *Journal of San Diego History* 12 (July):5-35.

Luomala, Katharine

1963 Flexibility in Sib Affiliation among the Diegueño. *Ethnology* 2(3):282-301.

MacPhail, Elizabeth C.

1979 *The Story of New San Diego and of its Founder, Alonzo E. Horton*. Revised edition, San Diego: San Diego Historical Society.

McAlester, Virginia and Lee McAlester

1990 *A Field Guide to American Houses*. New York: Alfred A. Knopf.

Minshall, Herbert L.

1976 *The Broken Stones: The Case for Early Man in California*. La Jolla: Copley Books.

1983 Geological Support for the Age Deduced by Aspartic Acid Racemization of a Human Skull Fragment from La Jolla Shores, San Diego, California. *Cultural Resource Management Center Casual Papers* 1(3):65-75. Department of Anthropology, San Diego State University.

1989 *Buchanan Canyon: Ancient Human Presence in the Americas*. San Marcos: Slawson Communications.

Moratto, Michael

1984 *California Archaeology*. Orlando: Academic Press.

Moriarty, James R.

1969 The San Dieguito Complex: Suggested Environmental and Cultural Relationships. *Anthropological Journal of Canada* 7(3):2-17.

Moriarty, James R., III, and Herbert L. Minshall

1972 A New Pre-Desert Site Discovered near Texas Street. *Anthropological Journal of Canada* 10(3):10-13.

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ADDITIONAL COMMENTS OR RECOMMENDATIONS

Neuerberg, Norman

1986 The Changing Face of Mission San Diego. *The Journal of San Diego History* 32(1):1-26.

Newland, James D.

1992 *The Americanization of the Cultural Landscape of Frontier San Diego 1846-1872*. Unpublished M.A. thesis, Department of Anthropology, San Diego State University.

Pourade, Richard F.

1961 *The History of San Diego: Time of the Bells*. San Diego: Union-Tribune Publishing Co.

1963 *The History of San Diego: The Silver Dons*. San Diego: Union-Tribune Publishing Co.

Reeves, Brian O.K.

1985 Early Man in the Americas: Who, When, and Why. In *Woman, Poet, Scientist: Essays in New World Anthropology Honoring Dr. Emma Louise Davis*, edited by Clark W. Brott, pp. 79-104. Socorro: Ballena Press.

Reeves, Brian O.K., John M.D. Pohl and Jason W. Smith

1986 The Mission Ridge Site and the Texas Street Question. In *New Evidence for the Pleistocene Peopling of the Americas*, edited by Alan L. Bryan, pp. 65-80. Orono: Center for the Study of Early Man.

Richman, Irving

1911 *California Under Spain and Mexico*. Boston: Houghlin-Mifflin Company.

Robbins-Wade, Mary

1990 *Prehistoric Settlement Patterns of Otay Mesa, San Diego County, California*. Unpublished M.A. thesis, Department of Anthropology, San Diego State University.

Robinson, Alfred

1846 *Life in California*. New York: Wiley & Putnum.

Robinson, W.W.

1948 *Land in California*. Los Angeles: University of California Press.

Rogers, Malcolm J.

1929 The Stone Art of the San Dieguito Plateau. *American Anthropologist* 31:454-467.

1966 *Ancient Hunters of the Far West*. San Diego: Union-Tribune Publishing.

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ADDITIONAL COMMENTS OR RECOMMENDATIONS

Rubertone, Patricia E.

1989 Landscape as Artifact: Comments on "The Archaeological Use of Landscape Treatment in Social, Economic and Ideological Analysis". *Historical Archaeology* 23(1):5-54.

San Diego Union

1873 *June 15, 1873 Issue.*

Shipek, Florence

1963 Kumeyaay (Diegueño-Kamia) Land Use and Agriculture. Report to Attorneys' Docket 80, Mission Indian Land Claims Case.

1989 An Example of Intensive Plant Husbandry: The Kumeyaay of Southern California. In *Foraging and Farming*, edited by Davis R. Harris and Gordon C. Hillman. London: Uniwin Hyman.

1991 *Delphina Cuero: her autobiography, an account of her last years, and her ethnobotanic contributions.* Menlo Park: Ballena Press.

Spier, Leslie

1923 Southern Diegueño Customs. *University of California Publications in American Archaeology and Ethnology* 20:292-358.

Smythe, William E.

1908 *The History of San Diego 1542-1908: An Account of the Rise and Progress of the Pioneer Settlement on the Pacific Coast of the United States.* San Diego: The History Company.

Stewart-Abernathy, Leslie C.

1986 Urban Farmsteads: Household Responsibilities in the City. *Historical Archaeology* 20(2):5-15.

Strand, R. G.

1962 *Geologic Map of California: San Diego-El Centro Sheet, Scale 1:250000.* California Division of Mines and Geology, Sacramento.

Taylor, R.E., L.A. Payen, C.A. Prior, P.J. Slota, Jr., R. Gillespie, J.A.J. Gowlett, R.E.M. Hedges, A.J.T. Jull, T.H. Zabel, D.J. Donahue and R. Berger

1985 Major Revisions in the Pleistocene Age Assignments for North American Skeletons by C-14 Accelerator Mass Spectrometry: None Older than 11,000 C-14 Years B.P. *American Antiquity* 50:136-140.

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ADDITIONAL COMMENTS OR RECOMMENDATIONS

Warren, Claude N.

1966 *The San Dieguito Type Site: Malcolm J. Rogers' 1938 Excavation on the San Dieguito River*. San Diego Museum Papers No. 5.

1967 The San Dieguito Complex: A Review and Hypothesis. *American Antiquity* 32:168-185.

Williams, Jack

1994 Personal interview with James D. Newland (September 16, 1994).